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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,249	04/09/2001	Brandon Duncan	ARC920010027US1	7575

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EXAMINER

BASOM, BLAINE T

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 11/10/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,249

Applicant(s)

DUNCAN ET AL.

Examiner

Blaine Basom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, there is no antecedent basis for “the graphic user interface,” which is recited in the claim. As claims 16-20 depend on claim 15 and include all of the limitations of claim 15, claims 16-20 are similarly considered indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,438,523, which is attributed to Oberteuffer et al. (hereafter referred to as “Oberteuffer”), and also over U.S. Patent No. 5,914,707, which is attributed to Kono. In general, Oberteuffer presents a computer system which is capable of processing both speech input and hand-drawn input (see column 3, lines 10-28). This computer system responds to such inputs by graphically displaying text or graphics accordingly (for example, see column 5, lines 24-45). Lastly, it is

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interpreted that such a computer system may be implemented as a book-sized computer, i.e. an “electronic book device” (see column 2, lines 51-63).

Thus regarding claims 1, 2, and 4, Oberteuffer presents an electronic book device which comprises a portable housing and a processor, as is known in the art, and whereby the processor displays content stored in a storage device by responding to plural input modes. Specifically regarding claim 4, these input modes include a speech input mode and a hand-drawn input mode, or in other words, a sound input mode and a graphics input mode. The electronic book device of Oberteuffer subsequently comprises a “speech interface” and a “pen interface,” whereby this speech interface includes an audio input device, specifically a microphone, and this pen interface includes a graphics input device, specifically an electronic pen (see column 4, lines 1-16).

Therefore, it is understood that the electronic book of Oberteuffer implements at least a graphics input mode and a sound input mode, whereby the electronic book includes at least one graphics input device and at least one audio input device, both sending input signals to the processor. It is further interpreted that the electronic book device of Oberteuffer implements a visual graphics output mode, whereby the electronic book comprises a visual display, which is responsive to the processor for outputting content (for example, see column 6, lines 2-23). However, Oberteuffer does not explicitly disclose that the electronic book is capable of outputting content using *plural* output modes, as is expressed in claim 1. Oberteuffer consequently does not disclose that these plural output modes include at least visual graphics *and* sound, and that the electronic book includes a visual display *and* at least one audio speaker, both being responsive to the processor for outputting content, as is expressed in claim 2.

Like Oberteuffer, Kono discusses electronic books capable of inputting data graphically and orally, wherein these electronic books respond to such inputs by outputting text or graphics accordingly (for example, see column 1, lines 13-52). Moreover, and specifically regarding the claimed invention, Kono discloses that such an electronic book may output audio data as well as this graphical data (see column 3, lines 39-45). For example, audio speech may accompany displayed text (see column 7, lines 29-32). In order to do so, the electronic book comprises a speaker in order to output audio data (see column 5, lines 7-23). Kono thus presents an electronic book which responds to input and is capable of outputting content using plural output modes, the plural output modes including at least visual graphics and sound, and wherein the device includes at least one visual display and at least one audio speaker, both being responsive to a processor for outputting content.

It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Oberteuffer and Kono before him at the time the invention was made, to modify the electronic book device taught by Oberteuffer such that it also outputs content via an audio output mode, as is done by the electronic book device of Kono. It would have been advantageous to one of ordinary skill to utilize such a combination because audio output further enhances understanding of graphically displayed content, as is demonstrated by Kono.

As per claim 3, Kono teaches that the electronic book is responsive to user input selecting an audio output mode. For example, Kono discloses that the electronic book outputs audio speech in response to the user selecting a particular icon (see column 7, lines 29-32). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the processor of the electronic book is responsive to user input selecting an output mode.

In reference to claim 5, Oberteuffer teaches that the electronic book is responsive to user input selecting an input mode (see column 7, lines 10-24). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the processor of the electronic book is responsive to user input selecting an input mode.

Concerning claim 6, Oberteuffer discloses that the electronic book responds to a graphics input mode by outputting content using a graphic user interface. For example, in response to a user inputting a hand-drawn image, the processor of the electronic book responds by displaying a corresponding “clean” representation of the image (see column 4, lines 45-53). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the processor of the electronic book responds to a graphics input mode by outputting content in a graphics output mode using a graphic user interface. Continuing further with claim 6, Kono discloses that audio information is output in response to the selection of a particular “voice” icon (see column 7, lines 29-32). It is interpreted that with the electronic book of Oberteuffer and Kono, speech commands may be used to select such icons (for example, see column 4, lines 54-61 of Oberteuffer). Thus with a speech command being used to select a voice icon, the processor responds to an audio input mode by outputting content in an audio output mode using an audio user interface.

In regard to claim 13, the processor of the above-described electronic book of Oberteuffer and Kono is considered an “abstract interface,” like that of the claimed invention, wherein this processor is responsible for accessing content stored in the data storage of the electronic book as is known in the art. In addition, Oberteuffer discloses that the electronic book may receive commands via its audio user interface, whereby it updates its graphical user interface in response

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thereto (for example, see column 5, lines 57-65). Kono similarly teaches that the electronic book may receive commands via its graphical user interface, whereby it updates its audio user interface in response thereto. Specifically, it is understood that commands to change a graphically displayed page of a document may be entered via the graphical user interface, whereby the speech interface is updated in order to reflect the currently displayed page (see column 7, lines 29-39). It is therefore understood that the above-described electronic book taught by Oberteuffer and Kono comprises: content stored in a data storage; an abstract interface accessing the data storage; an audio user interface communicating with the abstract interface; and a graphics user interface communicating with the abstract interface, the abstract interface receiving user input commands from the audio user interface and updating the graphics user interface in response thereto, the abstract user interface receiving user input commands from the graphics user interface and updating the audio user interface in response thereto.

In reference to claims 14 and 15, the electronic book of Oberteuffer and Kono includes a visual display associated with its graphics user interface and an audio speaker associated with its audio user interface, as is shown above in the rejection for claims 1, 2, and 4. Specifically, as is shown above, content is output in a graphics output mode using the graphics user interface, and content is output in an audio output mode using the audio user interface.

Regarding claims 7 and 16, Kono discloses that an electronic book may output both audio data and video data concurrently (see column 3, lines 39-45). Similarly, Oberteuffer discloses that a user may enter data into an electronic book by simultaneous graphical and oral commands (for example, see column 4, lines 17-64; and column 5, lines 24-45). It is therefore understood

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that the audio user interface and the graphical user interface of above-described electronic book of Oberteuffer and Kono may run simultaneously with each other.

As per claims 8, 10, 11, 17, and 19, Oberteuffer discloses that the electronic book may receive annotations from a user-selected interface, wherein the annotations are associated with user-selected portions of content, and interpreted to be stored by the electronic book. Moreover, the other user interface is updated with the annotations. Oberteuffer specifically discloses that a user may enter annotations via a speech interface (see column 5, lines 24-45), which may be user-selected (see column 7, lines 11-24), and whereby the annotations are displayed via the graphical user interface and are associated with an “organizational structure” displayed by the graphical user interface (see column 5, lines 24-45). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the electronic book’s processor receives for storage annotations from a user-selected user interface, wherein the annotations are associated with user-selected portions of content, and wherein the processor updates another user interface with the annotations.

Concerning claims 9, 12, 18, and 20, Kono teaches that a user may navigate through content via a user-selected user interface of the electronic book, wherein the other user interface is updated to reflect such navigation. For example, Kono discloses that a user may visually navigate, i.e. read, a displayed document, and wherein a voice icon associated with the current page may be selected in order to provide audio accompaniment of the displayed page (see column 7, lines 29-39). Thus a user may navigate through content via a graphical user interface, wherein the audio user interface is updated to reflect the currently displayed page. It is therefore understood that with the above-described combination of Oberteuffer and Kono, the electronic

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book's processor is programmed to allow a user to navigate through content using a user-selected user interface to render a navigation result, whereby the processor updates another user interface with the navigation result.

With respect to claim 21, the above-described electronic book of Oberteuffer and Kono is considered a "computer program product" like that of the claimed invention, as it is understood that such an electronic book comprises a computer program storage device and computer-readable instructions on the storage device, as is known in the art (see also, column 8, line 46 – column 10, line 26 of Kono). Moreover, and for the reasons described above in the rejection for claims 1, 2, and 4, it is understood that these computer-readable instructions cause the electronic book to display electronic content in more than one mode. It is further understood that such instructions include computer-readable code means for receiving an annotation to content via an audio user interface, associating the annotation with the content, and displaying the annotation and the associated content using a graphical user interface, as is shown above in the rejection for claims 8, 10, 11, 17, and 19.

Referring to claim 22, Oberteuffer teaches that a user may add text to a memo using a graphical user interface (for example, see column 5, lines 58-65). It is therefore understood that the user may add annotations to the memo using the graphical user interface, whereby it is understood that the annotations are associated with the memo. Moreover, Kono teaches that a document, like this memo, may be reproduced using an audio user interface (see column 7, lines 29-39). It is therefore understood that the above-described electronic book of Oberteuffer and Kono comprises: computer-readable code means for receiving an annotation to content via a graphical user interface; computer-readable code means for associating the annotation with the

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content; and computer-readable code means for displaying the annotation and associated content using an audio user interface.

Concerning claim 23, the above-described audio user interface and graphical user interface of the electronic book of Oberteuffer and Kono run simultaneously with each other, as is described above in the rejection for claims 7 and 16.

As per claims 24 and 26, the above-described electronic book of Oberteuffer and Kono is understood to comprise computer readable code means for allowing a user to navigate through the content using a user selected user interface in order to render a navigation result, whereby another user interface is updated with the navigation result, as is described above in the rejection for claims 9, 12, 18, and 20.

Regarding claim 25, the above-described electronic book of Oberteuffer and Kono is understood to comprise computer-readable code means for storing annotations from a user-selected user interface, whereby another user interface is updated with the annotations, as is described above in the rejection for claims 8, 10, 11, 17 and 19.

In regard to claims 27 and 28, the above-described electronic book of Oberteuffer and Kono is understood to teach a method for presenting content using an electronic book. In particular, and for the reasons described above in the rejection for claims 1, 2, and 4, it is understood that such a method comprises providing a portable housing having content electrically stored therein, and simultaneously implementing two modes of output for displaying the content. It is understood that these modes of output, specifically a graphical user interface and audio user interface, are each implemented by a “thread,” as is known in the art.

Concerning claim 29, the above-described audio user interface and graphical user interface threads of the electronic book of Oberteuffer and Kono run simultaneously with each other, as is described above in the rejection for claims 7 and 16. Moreover, it is interpreted that these threads are at the same location in the content (for example, see column 7, lines 29-39 of Kono; the speech output thread and audio output thread are at the same page of a document).

In regard to claims 30 and 31, it is understood that each output thread is associated with a corresponding input mode, either a graphical input mode or an audio input mode, for inputting annotations and user commands, as is described above in the rejection for claim 6. As Oberteuffer teaches that such input modes may be switched in response to user commands (see column 7, lines 11-24), it is interpreted that the above-described electronic book of Oberteuffer and Kono is similarly responsive to user commands to switch from displaying content from displaying the content using the first output thread to displaying the content using the second output thread.

Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. The applicant is required under 37 C.F.R. §1.111(C) to consider these references fully when responding to this action. The Ozawa et al. U.S. Patent cited therein presents device which comprises a graphical user interface and a speech interface for receiving graphical commands and speech commands, and which is for outputting graphics and sound. The Ando et al. U.S. Patent cited therein presents a system which comprises a speech interface and a graphical user interface. Lastly, the Diel et al. U.S. Patent cited therein presents a

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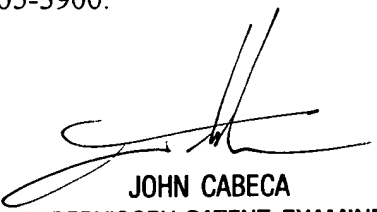
system which comprises different user interface types, and which allows the user to switch between these interface types.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (703) 305-7694. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

btb



JOHN CABECA
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